

IN THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 13, with the following rewritten paragraph:

This invention relates to a carbon monoxide transforming apparatus for a fuel cell, and to a fuel cell power generating system incorporated with the transforming apparatus.

Please replace the paragraph beginning at page 2, line 12, with the following rewritten paragraph:

The aforementioned reformed gas is composed of hydrogen as a main component, and by-products such as carbon dioxide, carbon monoxide and water vapor. Among these by-products, carbon monoxide acts to obstruct the electrochemical reaction between hydrogen and oxygen in the fuel cell. Under the circumstances, there has been a practice ~~practiced~~ to reduce the quantity of carbon monoxide and at the same time, to treat carbon monoxide in a carbon monoxide transforming apparatus so as to generate hydrogen as much as possible.

Please replace the paragraph beginning at page 5, line 23, with the following rewritten paragraph:

There is also a problem in the aforementioned carbon monoxide transforming apparatus for a fuel cell that since the aforementioned copper-zinc oxide-based catalyst is oxidized in air atmosphere at room temperature, the reduction of the catalyst is required at the time of start-up, thereby making it difficult to realize a quick (preferably, instantaneous) start-up, and therefore, the heat resistance of the catalyst is also required to be improved.

Please replace the paragraph beginning at page 6, line 6, with the following rewritten paragraph:

The present invention is to provide a carbon monoxide transforming apparatus ~~for fuel cell~~, which is capable of instantaneously performing a transformation and start-up operation on the occasion of transforming a gas containing, as main components, hydrogen, carbon

monoxide, carbon dioxide and water vapor so as to convert the carbon monoxide into carbon dioxide and at the same time to generate hydrogen, and also capable of operating it at an expanded range of temperature.

Please replace the paragraph beginning at page 7, line 10, with the following rewritten paragraph:

In the carbon monoxide transforming apparatus ~~for fuel cell~~ according to this invention, it is preferable that the catalyst is constructed such that the carrier having a base point on the surface thereof is formed of titanium oxide, and that platinum is carried on the carrier.

Please replace the paragraph beginning at page 8, line 23, with the following rewritten paragraph:

In the carbon monoxide transforming apparatus ~~for fuel cell~~ according to this invention, it is preferable that the reaction vessel is partitioned by means of a plurality of gas-permeating plates into plural sections which are arranged between the gas inlet port and the gas outlet port, each section housing a catalyst or a cooling coil, which are alternatively arranged.

Please replace the paragraph beginning at page 18, line 15, with the following rewritten paragraph:

The water generated at the oxidizing agent electrode 62 of fuel cell 60 is introduced together with exhaust air into a gas-liquid separator 70 through a piping 6, thereby allowing the water to be separated, the exhaust air being discharged as it is. The water thus separated by the gas-liquid separator 70 is recycled via a circulating piping 7, thereby allowing it to be used at the cooling section 63 as a cooling water for cooling the fuel cell 60. Further, a portion of the separated water is utilized, through the circulating piping 7 and the piping 3 constituting the water supply line, as a water vapor for the reformation of carbon monoxide.

Since a combustible moieties such as unutilized hydrogen, etc. are left ~~remained~~ in the exhaust gas of the fuel electrode 61, the exhaust gas is transferred via a piping 8 to a combustion chamber 80 and allowed to burn therein. The combustion gas thus generated is then introduced into the first heat exchanger 10₁, thus enabling it to be utilized as a heating source for pre-heating the raw fuel, etc, the combustion gas being subsequently discharged into air atmosphere.

Please replace the paragraph beginning at page 29, line 2, with the following rewritten paragraph:

Further, as shown in FIG. 4, when the carbon monoxide transforming apparatus is constructed such that the space inside the reaction vessel 41 is horizontally partitioned by making use of six perforated plates 44₁ to 44₆, that the catalyst 45 and the cooling coils 46₁ and 46₂ are separately arranged in these partitioned spaces, and that the catalyst 45 and the coiling coils 46₃ are coexisted in the partitioned space in the vicinity of the discharge pipe 43 where the exothermic reaction is rather slow, it is possible to cool the catalyst 45 in the catalyst-filling zones by each of the cooling coils 46₁ to 46₃ in conformity with the magnitude of the exothermic temperature of the catalyst-filling zones. As a result, each catalyst-filling zone can be controlled to a suitable temperature, thereby making it possible to execute a more effective transforming reaction between carbon monoxide and water vapor, and to further elongate the life of catalyst. Moreover, it is possible to lower the temperature (outlet temperature) of gas being discharged from the discharge pipe 43 of the reaction vessel 41 to not more than 250°C. Additionally, since the catalyst 45 and the cooling coils 46₃ are coexist ~~coexisted~~ in the partitioned space in the vicinity of the discharge pipe 43 of the reaction vessel 41, it is possible to miniaturize the carbon monoxide transforming apparatus as compared with the carbon monoxide transforming apparatus shown in FIG. 3.